

**CLAIMS**

What is claimed is:

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1. A method for management of a distributed data processing system, the method comprising:
  - associating a set of logical networks in the distributed data processing system and/or a set of physical networks in the distributed data processing system with an anchor object;
  - generating a topology map, wherein a root node of the topology map is the anchor object; and
  - displaying the topology map.

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2. The method of claim 1 further comprising:
  - associating the anchor object with a customer.
3. The method of claim 1 further comprising:
  - editing the topology map by creating topology elements including relations to other topology elements.
4. The method of claim 3 further comprising:
  - creating a user-defined topology element container.
5. The method of claim 3 further comprising:
  - creating relations between the user-defined topology element container and other containers.
- 30 6. The method of claim 1 further comprising:
  - receiving a customer-defined topology comprising customer-defined topology elements.

7. The method of claim 6 further comprising:

wherein the customer-defined topology elements are containers containing other elements.

5 8. The method of claim 6 further comprising:

receiving a customer-defined name to be collectively associated with elements within the anchor object.

9. The method of claim 8 further comprising:

10 discovering customization resources to be associated with elements of the customer-defined topology.

15 10. The method of claim 9 further comprising:

determining a customization resource based on an association between an identity of a user and a customer-defined topology element.

11. The method of claim 1 further comprising:

20 uniquely associating each anchor object in a set of anchor objects with a customer in a set of customers, wherein the distributed data processing system is managed on behalf of one or more customers in the set of customers.

25 12. The method of claim 1 further comprising:

simultaneously displaying a plurality of anchor objects.

13. The method of claim 1 further comprising:

30 associating a root-level name in a name space with the anchor object.

14. The method of claim 1 further comprising:  
providing a selection mechanism whereby a user may  
select a displayed object; and  
displaying detailed information for a selected object.

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15. The method of claim 14 further comprising:  
determining whether a user has authorized access to the  
detailed information for the selected object; and  
restricting a display operation for the detailed  
10 information for the selected object to data items in the  
detail information for which the user has authorized access.

16. The method of claim 14, wherein the anchor object is a  
container object, further comprising:

15 retrieving an alternative graphic object for  
representing the selected object; and  
displaying the alternative graphic object.

17. The method of claim 1 further comprising:  
20 allowing an administrative user to select a display  
view of the topology map, wherein a display view of the  
topology map comprises a hierarchical tree view of all  
objects discovered by a user-specified distributed discovery  
controller.

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18. The method of claim 1 further comprising:

representing the distributed data processing system as a set of scopes, wherein a scope comprises a logical organization of network-related objects;

5 associating each scope with a customer, wherein each scope is uniquely assigned to a management customer;

managing the distributed data processing system as a set of logical networks, wherein a logical network comprises a set of scopes, and wherein each logical network is 10 uniquely assigned to a customer.

19. The method of claim 1 further comprising:

dynamically discovering endpoints, systems, and networks within the distributed data processing system;

15 correspondingly representing endpoints, systems, and networks within the distributed data processing system as a set of endpoint objects, system objects, and network objects; and

20 logically organizing the endpoint objects, system objects, and network objects within a set of scopes, wherein each endpoint object, each system object, and each network object is uniquely assigned to a scope such that scopes do not logically overlap.

20. A method for management of a distributed data processing system, the method comprising:

creating a customer-defined topology;

associating the customer-defined topology with a

5 topology derived from a physical network to form a combined topology map;

associating customization resources with elements within the combined topology map; and

displaying the combined topology map.

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21. The method of claim 20 further comprising:

requesting a network management operation based on the combined topology map.

22. A method for management of a distributed data processing system, wherein the distributed data processing system is managed on behalf of a plurality of management customers, the method comprising:

5 representing the distributed data processing system as a set of scopes, wherein a scope comprises a user-defined logical organization of network-related objects;

associating each scope with an anchor object, wherein an anchor object is uniquely assigned to a management 10 customer;

generating a topology map, wherein a root node of the topology map is the anchor object; and

allowing an administrative user to select a display view of the topology map.

15 23. The method of claim 22 wherein a display view of the topology map comprises a hierarchical tree view of all objects discovered by a user-specified distributed discovery controller.

20 24. The method of claim 22 wherein a display view of the topology map comprises a hierarchical tree view of all objects discovered by a plurality of distributed discovery controllers.

25 25. The method of claim 22 wherein a display view of the topology map comprises a hierarchical tree view of all objects discovered by all distributed discovery controllers for which a user has authorized access.

26. An apparatus for managing a distributed data processing system, the apparatus comprising:

means for associating a set of logical networks in the distributed data processing system and/or a set of physical networks in the distributed data processing system with an anchor object;

means for generating a topology map, wherein a root node of the topology map is the anchor object; and

means for displaying the topology map.

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27. The apparatus of claim 26 further comprising:

means for associating the anchor object with a customer.

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28. The apparatus of claim 26 further comprising:

means for editing the topology map by creating topology elements including relations to other topology elements.

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29. The apparatus of claim 28 further comprising:

means for creating a user-defined topology element container.

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30. The apparatus of claim 28 further comprising:

means for creating relations between the user-defined

topology element container and other containers.

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31. The apparatus of claim 26 further comprising:

means for receiving a customer-defined topology comprising customer-defined topology elements.

32. The apparatus of claim 31 further comprising:

means for wherein the customer-defined topology elements are containers containing other elements.

33. The apparatus of claim 31 further comprising:  
means for receiving a customer-defined name to be  
collectively associated with elements within the anchor  
object.

34. The apparatus of claim 33 further comprising:  
means for discovering customization resources to be  
associated with elements of the customer-defined topology.

35. The apparatus of claim 34 further comprising:  
means for determining a customization resource based on  
an association between an identity of a user and a  
customer-defined topology element.

36. The apparatus of claim 26 further comprising:  
means for uniquely associating each anchor object in a  
set of anchor objects with a customer in a set of customers,  
wherein the distributed data processing system is managed on  
behalf of one or more customers in the set of customers.

37. The apparatus of claim 26 further comprising:  
means for simultaneously displaying a plurality of  
anchor objects.

38. The apparatus of claim 26 further comprising:  
means for associating a root-level name in a name space  
with the anchor object.

39. The apparatus of claim 26 further comprising:  
means for providing a selection mechanism whereby a  
user may select a displayed object; and

means for displaying detailed information for a selected object.

40. The apparatus of claim 39 further comprising:

5 means for determining whether a user has authorized access to the detailed information for the selected object; and

means for restricting a display operation for the detailed information for the selected object to data items  
10 in the detail information for which the user has authorized access.

41. The apparatus of claim 39, wherein the anchor object is a container object, further comprising:

15 means for retrieving an alternative graphic object for representing the selected object; and

means for displaying the alternative graphic object.

42. The apparatus of claim 26 further comprising:

20 means for allowing an administrative user to select a display view of the topology map, wherein a display view of the topology map comprises a hierarchical tree view of all objects discovered by a user-specified distributed discovery controller.

43. The apparatus of claim 26 further comprising:

means for representing the distributed data processing system as a set of scopes, wherein a scope comprises a logical organization of network-related objects;

5 means for associating each scope with a customer, wherein each scope is uniquely assigned to a management customer;

means for managing the distributed data processing system as a set of logical networks, wherein a logical

10 network comprises a set of scopes, and wherein each logical network is uniquely assigned to a customer.

44. The apparatus of claim 26 further comprising:

means for dynamically discovering endpoints, systems, and networks within the distributed data processing system;

correspondingly representing endpoints, systems, and networks within the distributed data processing system as a set of endpoint objects, system objects, and network objects; and

20 means for logically organizing the endpoint objects, system objects, and network objects within a set of scopes, wherein each endpoint object, each system object, and each network object is uniquely assigned to a scope such that scopes do not logically overlap.

45. An apparatus for management of a distributed data processing system, the apparatus comprising:

means for creating a customer-defined topology;

means for associating the customer-defined topology

5 with a topology derived from a physical network to form a combined topology map;

means for associating customization resources with elements within the combined topology map; and

means for displaying the combined topology map.

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46. The apparatus of claim 45 further comprising:

means for requesting a network management operation based on the combined topology map.

47. An apparatus for management of a distributed data processing system, wherein the distributed data processing system is managed on behalf of a plurality of management customers, the apparatus comprising:

5 means for representing the distributed data processing system as a set of scopes, wherein a scope comprises a user-defined logical organization of network-related objects;

10 means for associating each scope with an anchor object, wherein an anchor object is uniquely assigned to a management customer;

15 means for generating a topology map, wherein a root node of the topology map is the anchor object; and

means for allowing an administrative user to select a display view of the topology map.

48. The apparatus of claim 47 wherein a display view of the topology map comprises a hierarchical tree view of all objects discovered by a user-specified distributed discovery controller.

20 49. The apparatus of claim 47 wherein a display view of the topology map comprises a hierarchical tree view of all objects discovered by a plurality of distributed discovery controllers.

25 50. The apparatus of claim 47 wherein a display view of the topology map comprises a hierarchical tree view of all objects discovered by all distributed discovery controllers for which a user has authorized access.

51. A computer program product on a computer readable medium for use in managing a distributed data processing system, the computer program product comprising:

5 associating a set of logical networks in the distributed data processing system and/or a set of physical networks in the distributed data processing system with an anchor object;

10 generating a topology map, wherein a root node of the topology map is the anchor object; and

10 displaying the topology map.

52. The computer program product of claim 51 further comprising:

15 associating the anchor object with a customer.

53. The computer program product of claim 51 further comprising:

20 allowing an administrative user to select a display view of the topology map, wherein a display view of the topology map comprises a hierarchical tree view of all objects discovered by a user-specified distributed discovery controller.